#### TECHNOLOGIES

#### **Innovative Network Solutions**

24 Port 10 Gigabit Managed Switch Advanced Switching and Routing System

# **Plug and Play**

Niagara 2924 is a 24 Port 10 Gigabit Specialized Switch. The Niagara 2924 is an advanced switching and routing system providing Layer 2 switching, IP v4/v6 routing, QoS support and management capabilities. The system is built for optimal flexability enabling multi-mode or single mode fiber media configuration and connectivity to 10GE or 1GE networks via SFP+ or SFP connectors. The unit's management functionality can be utilized via an extensive web GUI or CLI which enables flexibility and multiple configurations.



The Niagara 2924 is designed to integrate with UTM, Firewall, WAN Acceleration, QoS, IPS, IDS and Enterprise and Datacenter IT security appliances.

The Niagara 2924 provides layer 2/3/4 10 Gigabit Ethernet enterprise and datacenter capabilities. Layer 2 switching, IP v4/v6 routing, QoS and management capabilities.

The System is based on Marvell Prestera switch family supporting 1GE and 10GE technology with multiple ports.

### **Target Applications**

The comprehensive feature set is well suited for a range of applications including:

- Carrier Ethernet and Metro Ethernet devices
- Datacenter switching applications
- IP-DSLAMs, blade servers
- Managed Ethernet switches
- MTU or MDU premises switches

## Management

- SNMP (v1, v2c, v3) agent and MIB support; configuration save / restore
- CLI (Console, Telnet, SSH), pre-defined CLI commands
- WebUI (HTTP and HTTPS / SSL), pre-defined web pages
- · Software and configuration upgrade through TFTP or SFTP
- Syslog client (with reliable syslog delivery) and relay
- TCP/IP stack for IPv4 and IPv6 (including ARP, ICMP, ND, UDP)
- DHCP (client, server, relay) for IPv4
- Stateless DHCP service for IPv6 for specific options assignment
- RADIUS client
- TACACS+ client
- RMONv1, RMONv2, DSMON
- · IP authorized managers
- Ethernet port control and management
- Traffic mirroring
- SNTP (Simple Network Time Protocol) client
- · Chassis management
- Switch stacking

# Basic Layer 2 switching

Transparent bridging

- VLAN aware bridging with GARP, GVRP, GMRP
- Rapid Spanning Tree Protocol
- Multiple Spanning Tree Protocol
- Per VLAN Rapid Spanning Tree Protocol (enhanced) PVRST+
- IGMP snooping
- IGMP filtering
- IGMP Proxy
- MLD snooping
- Link Aggregation with LACP
- 802.1x authentication
- Link Layer Discovery Protocol (LLDP)
- Ethernet OAM 802.3ah
- MRP (Multiple Registration Protocol)

#### Routing

- IPv4 unicast static routing, RIP v1/v2, OSPFv2, IS-IS, BGP4
- IPv4 multicast IGMP router, PIM-SM/DM, DVMRP
- IPv4 NAT (Network Address Translation) unicast and multicast
- IPv6 unicast static routing, RIP v6, OSPFv3, IS-IS, BGP4+
- IPv6 multicast MLD, PIMv6
- Route redistribution between IPv4 routing protocols and static routes
- Route maps for filtering route advertisements and route redistribution – IPv4 and IPv6
- IPv6 tunneling over IPv4 IPv4 and IPv6
- Graceful restart for BGP, BGP4+, IS-IS, OSPFv2, OSPFv3
- Hot standby redundancy for OSPFv2, OSPFv3, PIM for IPv4/v6
- Virtual routing with IPv4/v6 static routing, OSPFv2/v3, IS-IS for IPv4, RIPv2
- VRRP for router redundancy

### Advanced Layer 2 Switching, MPLS / VPLS

- Q-in-Q VLAN tunneling and Provider bridging
- MPLS static LSPs, LDP, RSVP-TE, PWE3 VCs for L2 VPNs

### QoS (dependent on silicon support)

- ACLs (Access Control Lists) for traffic filtering
- 802.1p, DiffServ, traffic prioritization queuing, policing, shaping
- Rate limiting and storm control
- Flow control and priority flow control
- Enhanced transmission selection

# **Highly Reliable**

Niagara 2924 utilizes two redundant internal power supplies for maximum reliability.

Niagara 2924 utilizes advanced design and power efficiency techniques for optimal operation.

Linux Operating system	Chassis management, Stacking		
	System management, config save / restore, DHCP-IPv4, Stateless DHCP for IPv6, RMONv1/v2, DSMON, Syslog, Mirroring, SNTP, software upgrade		gement – CL (HTTP / SSL)
	MPLS	ACL, QOS, Flow Control, Priority Flow Control, Rate Control, Storm Control, Enhanced Transmission Selection	I (console , SNMPv3,
	Layer 3 suite – IPv4 & IPv6, RIP, RIPv6, OSPF, OSPFv3, BGP4, IGMP, MLD, PIM, DVMRP		/ Telnet / S Radius, T
	Layer 2 suite – VLAN, RSTP/MSTP, GVRP / MVRP, GMRP / MMRP, LA, LACP, IGMP / MLD snooping, EOAM, LLDP		SSH), WebUI Tacacs+

#### Table 1 - Environmental

Operating Temperature	0 to 55 ℃ or 32 to 131 ℉	
Operating Humidity	5 to 95%	
Maximum power consumption	150 W	
Airflow	100 lf/m	

Table 2 - Dimensions

	mm	inches
Length	279.4	11
Height	40.64	1.6
Width	426.72	16.8

#### **Product Line**

- Network Interface Cards with Bypass
- Network Interface Cards without Bypass
- External Bypass Products
- SSL/IPSec Cards
- Embedded Switches
- Embedded Platforms
- Development Tools
- TAP Systems

#### **About Us**

Interface Masters Technologies is a leading vendor in the Bypass Networking market, based in the heart of the Silicon Valley. Interface Master's expertise lies in Gigabit and 10 Gigabit networking solutions that integrate with monitoring, inline networking, security, central office and other mission-critical IT appliances. Flagship product lines include specialized internal server adapter cards, embedded switch cards, and external intelligent Network Bypass and failover systems that increase network reliability and inline appliance availability.

Offering over 70 products based on Fast Ethernet, Gigabit Ethernet, and 10 Gigabit Ethernet, Interface Master's adds value to the mission-critical IT sector requiring Security, UTM, Storage Area Networks (SAN), Intrusion Detection & Prevention, QoS, Packet Classification and WAN Acceleration appliances. Company Headquarters are located in San Jose, California with satellite offices in Hong Kong, Germany and the UK.





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